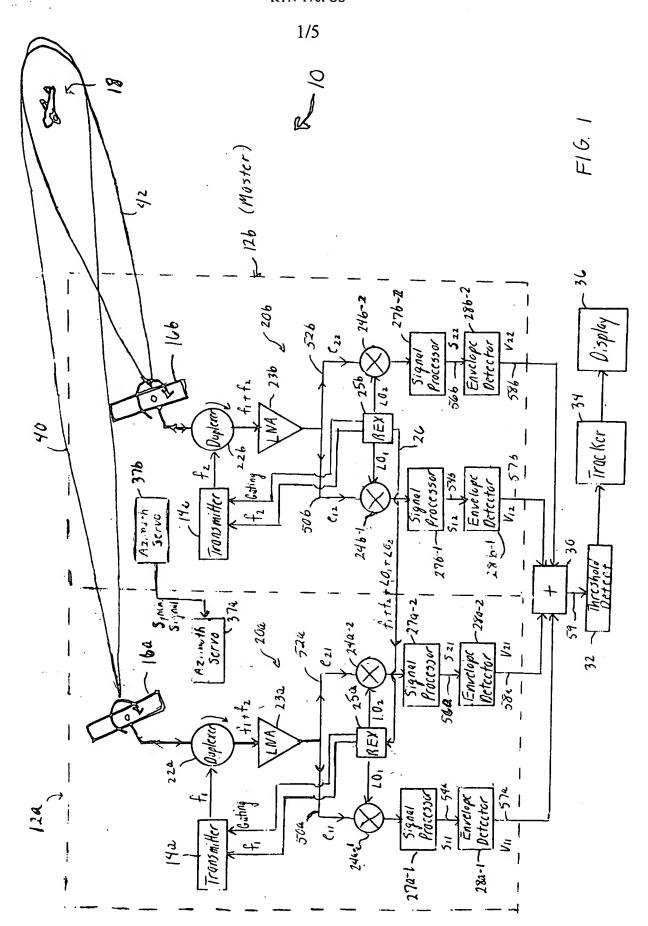
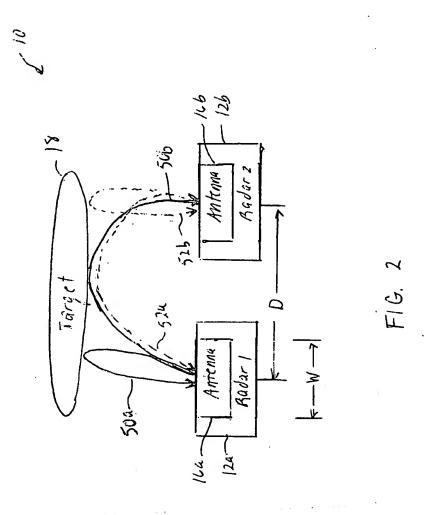
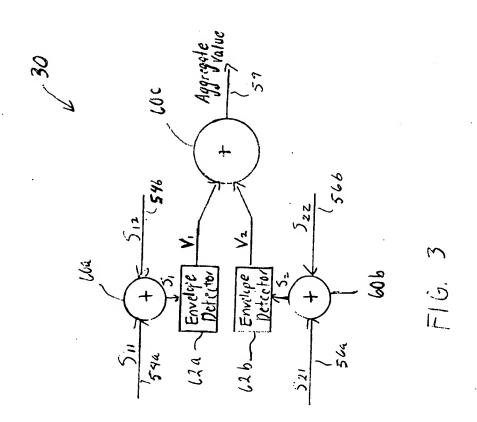
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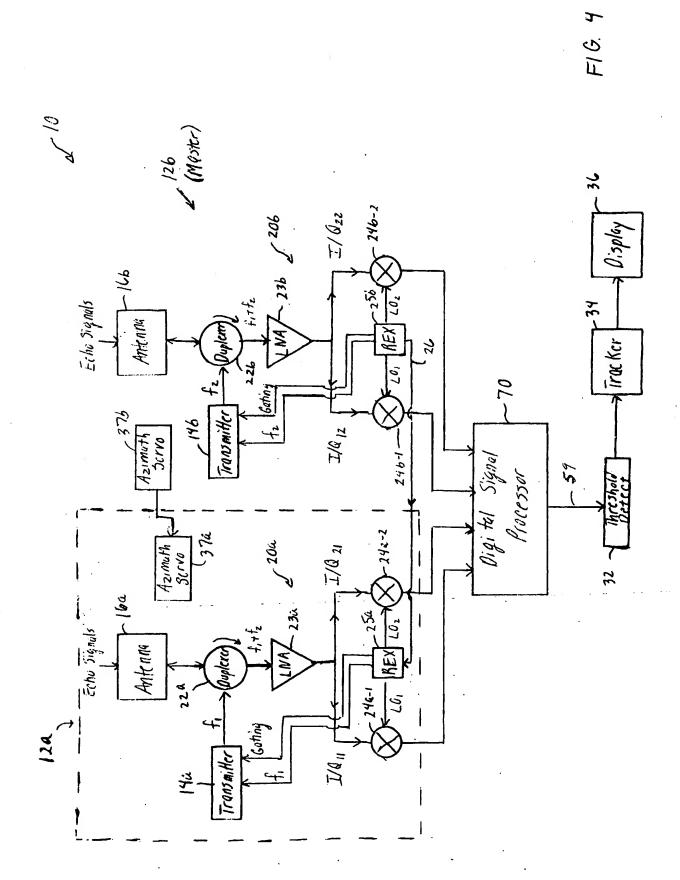
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Mode	Carrier	Coherent or	Receiver	How	Type of Target	SNR
	Frequencies	Incoherent	Processing of	Waveforms		Sensitivity
	for Radar 1 (f_1) and Radar 2 (f_2)	on Transmit	S ₁₁ , S ₁₂ and S ₂₁ , S ₂₂	Transmitted		Improvement (dB)
Search/	f ₁ ≠f ₂	Incoherent	Incoherent	Simultaneously	Non-fluctuating	9~
Track			(as shown in FIG. 1)	•)	
Search/	f1≠f2	Incoherent	Coherent +	Simultaneously	Non-fluctuating	9~
Track			Incoherent			
	,		(as shown in			
			FIG. 3)			
Track	$f_1 = f_2$	Coherent	Coherent	Simultaneously	Non-fluctuating	6~
Track	$\mathbf{f_l} = \mathbf{f_2}$	Coherent	Coherent +	Simultaneously	Non-fluctuating	6~
			Incoherent			
Search/	$f_1 = f_2$	Incoherent	Incoherent	Sequentially	Non-fluctuating	9~
Track						
Search/	$f_1 = f_2$	Incoherent	Coherent +	Sequentially	Non-fluctuating	9~
Track			Incoherent			
Search/	$f_1 \neq f_2$	Incoherent	Incoherent	Simultaneously	Swerling-II	8.7
Track						

F16.5